

Remarks

Claims 1-11 are pending. Claims 1, 6, 7 and 8 have been amended, wherein limitations from original dependent claims 6 and 7 have incorporated into independent claims 1 and 8.

Claim Rejections - 35 U.S.C. §103

Claims 1-11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Scherbel in view of Woodward and further in view of WO 01/64978 (Lintecum). Applicant traverses the rejection as to all pending claims.

Claim 1 is directed to a woven fabric and claim 8 is directed to a process for making a woven fabric. Each claim requires a bicomponent filament and a staple yarn as the weft which is woven with warp fibers by pick-and-pick or co-insertion constructions. Claims 1 and 8 have been amended to include the limitations to the unload power from original claim 6 and the weight percent of bicomponent fiber from original claim 7. No new matter has been added. The claimed weft-stretch woven fabric construction has an unexpectedly higher unload power than would otherwise be expected in view of the lower amount of bicomponent filament present in the fabric construction.

The purported combination of Scherbel, Woodward and Lintecum does not teach or suggest a woven fabric construction in which a bicomponent filament and a staple yarn forming the weft are woven with warp fibers by pick-and-pick or co-insertion constructions to achieve a weft-stretch fabric with normalized unload power of at least about 2.2 N·m/g, where the fabric comprises only from about 5 wt% to about 25 wt% of the bicomponent fiber.

Scherbel teaches a *staple bicomponent yarn*, not a bicomponent filament, being an alternate weft in a knit or woven construction to be used as an interlining. The staple fibers of Scherbel provide less stretch recovery than the bicomponent filament used in the woven construction claimed by the present Applicant. Scherbel teaches away from the inventions claimed in claims 1 and 8. In claims 1 and 8, the bicomponent filaments comprise no more than 25 wt% of the fabric. By contrast, Scherbel states at Col. 4, lines 21 to 23: “the proportion of multicomponent fibers in the mixture is preferably at least 50%...”. Moreover, one seeking to create a weft-stretch fabric with suitable unload

power would not be disposed to consider Scherbel because Scherbel does not intend to use the interlining as a stretch fabric. Rather, Scherbel requires that the interlining be napped, and that an adhesive layer be applied to the unnapped surface.

Woodward does not fill the gaps in the disclosure of Scherbel. Applicant acknowledges that the leno woven fabric in Woodward is a form of pick and pick construction in that an elastic weft 13 may be alternated with a nonelastic weft 14 (Col. 2, lines 26 to 29). However, none of the weft threads in Woodward are bicomponent filaments. Thus, there is certainly no teaching in Woodward of a woven fabric with polyester bicomponent filaments forming from 5 wt% to 25 wt% of the fabric construction.

Woodward uses the leno weave specifically to restrict contraction of the fabric. The reduced contraction is due to the “crossing of the individual elastic ground warps of the group” (Col. 1, line 60 to Col. 2, line 1), not to the use of alternating elastic and non-elastic weft yarns. Woodward purposefully seeks to restrict the contraction and obtain a greater porosity in the fabric (Col. 2, lines 1-3). Thus, it is not correct to state that Woodward uses the alternating weft to restrict the total stretch of the elastic fiber to give the fabric high elastic recovery. There is no basis upon which Scherbel (concerning certain multicomponent staple yarns) may be combined with Woodward (concerning leno weave to restrict contraction of monocomponent elastic yarns).

Nor does Lintecum fill the gaps in the disclosure of Scherbel. The bicomponent yarns disclosed by Lintecum are indicated as useful for forming knit fabrics (page 19, lines 31-34). Thus, Lintecum directs skilled persons away from using the bicomponent yarns to create woven fabrics. Moreover, when Lintecum does incorporate bicomponent yarns into woven constructions in Examples 20 and 25, the bicomponent yarns were used in the entire weft – these yarns were not used in a pick and pick or co-insertion construction. Nor did Lintecum use a spun staple yarn in combination with the bicomponent to make up the weft in these examples. The bicomponent yarn was first combined with other non-bicomponent yarn by air-jet texturing or by intermingling to make a combination yarn. The combination yarn was then used in the entire weft, not in a pick and pick or co-insertion construction. Thus, Lintecum teaches away from the specific weft improvement of the inventions of claims 1 and 8.

The Examiner's purported rejection under §103 is hindsight based, picking and choosing portions of the references out of context and with the benefit of the disclosure of Applicant's claimed invention. There is no suggestion or motivation in the art to combine these references in the manner the Examiner proposes. Even if the alleged combination were made, none of the references show the unexpected discovery that a woven fabric of a specific pick and pick or co-insertion construction and with a low elastic bicomponent filament content retains a normalized unload power of at least about 2.2 N·m/g as compared to a woven fabric with greater elastic bicomponent filament content. Scherbel directs those skilled in the art to use at least 50 wt% bicomponent fibers, whereas the present claims are limited to from 5 wt% to 25 wt% bicomponent filaments. Woodward has no bicomponent fibers or filaments, and Lintecum does not counter Scherbel's express preference for greater bicomponent fiber content.

Data on unexpected normalized unload power values is presented in the Table on page 10 of the present application. Compare Examples 1 to 4 with Comparison Example 1. The normalized weft unload power in Comparison Example 1 is below that of Examples 1 to 4 even though Comparison Example 1 had greater amount of bicomponent filament (bicomponent filament was in every pick in the weft).

As amended, the inventions of claims 1 and 8 patentably distinguish. For the same reasons, all dependent claims also distinguish over these references.

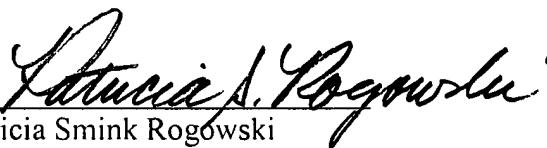
Conclusion

In view of the above amendments and remarks, each of the presently pending claims in this application is believed to be in immediate condition for allowance.

No fee is believed due. Should any fee be due before the Examiner may consider this paper, including a fee for an extension of time, such extension is requested, and the Director is authorized to charge the fee to Deposit Account No. 03-2775 (Connolly Bove Lodge & Hutz LLP -10253-100).

Dated: March 22, 2004

Respectfully submitted,

By 
Patricia Smink Rogowski
Registration No.: 33,791
CONNOLLY BOVE LODGE & HUTZ LLP
P. O. Box 2207
Wilmington, Delaware 19899-2207
(302) 658-9141
(302) 658-5614 (Fax)
Attorney for Applicant